

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A projection exposure apparatus that supplies liquid in a space between a projection optical system and a substrate and transfers a pattern on said substrate via said projection optical system and said liquid, said apparatus comprising:

a substrate table on which a substrate is mounted that can be moved holding said substrate; and

a correction unit that corrects positional deviation occurring in at least one of said substrate and said substrate table due to supply of said liquid.

2. (Original) The projection exposure apparatus of Claim 1, said apparatus further comprising:

a position measuring system that measures positional information of said substrate table, wherein

said correction unit corrects positional deviation occurring in at least one of said substrate and said substrate table due to supply of said liquid according to the position of said substrate table measured by said position measuring system.

3. (Currently Amended) The projection exposure apparatus of Claim 2 wherein

said correction unit corrects an error in said positional information in at least one of a said substrate and a said substrate table measured directly or indirectly by said position measuring system, which occurs due to supply of said liquid.

4. (Original) The projection exposure apparatus of Claim 1 wherein
said correction unit corrects positional deviation that occurs by a change in the shape
of said substrate table.

5. (Original) The projection exposure apparatus of Claim 1 wherein
said substrate table has a fiducial member used for position setting, and
said correction unit corrects positional deviation between said fiducial member and
said substrate.

6. (Original) The projection exposure apparatus of Claim 1 wherein
said correction unit corrects the distance between said projection optical system and
said substrate in an optical axis direction of said projection optical system.

7. (Original) The projection exposure apparatus of Claim 1 wherein
said correction unit corrects said positional deviation according to a physical quantity
related to said liquid.

8. (Currently Amended) The projection exposure apparatus of ~~Claim 5~~Claim 7
wherein
said physical quantity related to said liquid includes at least one of pressure of said
liquid and surface tension of said liquid.

9. (Original) The projection exposure apparatus of Claim 1 wherein
said correction unit corrects positional deviation that occurs by vibration of said
substrate table.

10. (Original) The projection exposure apparatus of Claim 1, said apparatus further comprising:

a mask stage on which a mask having said pattern formed is mounted that can be moved holding said mask; and

said correction unit corrects said positional deviation by changing a thrust given to at least one of said substrate table and said mask stage.

11. (Original) The projection exposure apparatus of Claim 10 wherein said correction unit comprises a controller that changes said thrust by feedforward control.

12. (Currently Amended) The projection exposure apparatus ~~in any one of Claims 1 to 11~~ of Claim 1 wherein

said correction unit corrects said positional deviation based on position measuring results of a transferred image of said pattern transferred on said substrate.

13. (Currently Amended) The projection exposure apparatus ~~in any one of Claims 1 to 11~~ of Claim 1 wherein

said correction unit corrects said positional deviation based on simulation results.

14. (Original) A stage unit that has a substrate table which movably holds a substrate whose surface is supplied with liquid, said unit comprising:

a position measuring unit that measures positional information of said substrate table; and

a correction unit that corrects positional deviation occurring in at least one of said substrate and said substrate table due to supply of said liquid.

15. (Original) The stage unit of Claim 14 wherein
said correction unit corrects positional deviation that occurs by a change in the shape of said substrate table.

16. (Currently Amended) The stage unit of ~~one of Claims 14 and 15~~ Claim 14 wherein
said substrate table has a fiducial member used for position setting, and
said correction unit corrects positional deviation between said fiducial member and
said substrate.

17. (Original) An exposure method in which liquid is supplied to a space between a projection optical system and a substrate held on a substrate table and a pattern is transferred onto said substrate via said projection optical system and said liquid, said method comprising:
a detection process in which a change occurring in at least one of said substrate and said substrate table due to supply of said liquid is detected; and
a transfer process in which said pattern is transferred onto said substrate based on results of said detection.

18. (Original) The exposure method of Claim 17 wherein
in said transfer process, said transfer is performed with at least one of positional deviation that occurs by a change in the shape of said substrate table and the distance between said projection optical system and said substrate in an optical axis direction of said projection optical system corrected.

19. (Original) The exposure method of Claim 17 wherein
in said detection process, a change according to a physical quantity related to said
liquid is detected, and
in said transfer process, said transfer is performed with said change according to said
physical quantity related to said liquid corrected.

20. (Original) The exposure method of Claim 19 wherein
said physical quantity related to said liquid includes at least one of pressure of said
liquid and surface tension of said liquid.

21. (Original) The exposure method of Claim 17 wherein
in said transfer process, said transfer is performed with positional deviation that
occurs by vibration of said substrate table corrected.

22. (Original) The exposure method of Claim 17 wherein
in said transfer process, said transfer is performed with said change corrected by
changing a thrust given to at least one of said substrate table and a mask stage on which a
mask where said pattern is formed is mounted.

23. (Original) The exposure method of Claim 22 wherein
the change of said thrust is performed by feedforward control.

24. (Currently Amended) The exposure method ~~in any one of Claims 17 to 23 of~~
Claim 17 wherein

said change is corrected based on position measuring results of a transferred image of said pattern transferred on said substrate.

25. (Currently Amended) The exposure method ~~in any one of Claims 17 to 23 of~~
Claim 17 wherein

said change is corrected based on simulation results.

26. (New) The projection exposure apparatus of Claim 1 wherein
supply of said liquid in said space between said projection optical system and said
substrate is performed by a liquid supply unit, and
said liquid supply unit supplies liquid to a part of said substrate.

27. (New) The projection exposure apparatus of Claim 1 wherein
said substrate table has a holding member that holds said substrate and plate members
arranged in the periphery of said holding member.

28. (New) The projection exposure apparatus of Claim 2 wherein
said position measuring system measures positional information of said substrate table
without involving said liquid.

29. (New) The stage unit of Claim 14 wherein
supply of said liquid to said substrate is performed by said liquid supply unit, and
said liquid supply unit supplies liquid to a part of said substrate.

30. (New) The stage unit of Claim 14 wherein

said substrate table has a holding member that holds said substrate and plate members arranged in the periphery of said holding member.

31. (New) The stage unit of Claim 14 wherein
said position measuring system measures positional information of said substrate table without involving said liquid.

32. (New) The exposure method of Claim 17 wherein
said liquid is supplied to a part of said substrate.

33. (New) The exposure method of Claim 17 wherein
on said substrate table, plate members are arranged in the periphery of a holding member that holds said substrate.